



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

F

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,895	07/23/2003	Norbert Weber	45407	6751
1609	7590	05/04/2004	EXAMINER	
ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P. 1300 19TH STREET, N.W. SUITE 600 WASHINGTON,, DC 20036			BRINSON, PATRICK F	
			ART UNIT	PAPER NUMBER
			3752	
DATE MAILED: 05/04/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/624,895	WEBER, NORBERT
	<b>Examiner</b>	<b>Art Unit</b>
	Patrick F. Brinson	3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-7 and 10-14 is/are rejected.
- 7) Claim(s) 8 and 9 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>7/23/03</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Objections***

2. Claims 10 and 13 are objected to because of the following informalities: Claim 10 recites “said gas side” without proper antecedent basis. Claim 13 recites the separating element including “a connection part” for closing the fluid connection, however the specification discloses, page 8, last paragraph, that the separating element includes a “stop part” for closing the fluid connection port (40). Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 is indefinite, wherein it is not made clear if the additional housing is seated on the second housing part or on the first housing part.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. 4,474,215 to **Richter et al.**

The patent to **Richter et al.** discloses an accumulator (1) including a housing, with a pair of shells (2 and 3) and a separating element or membrane (12) positioned therebetween dividing the housing into a gas (13) and a fluid (14) chamber. A gas refilling chamber is formed by at least one additional housing part (8) connected with and forming a unit with the accumulator housing and at least one connecting opening (10) in the accumulator housing connecting the gas refilling chamber to the gas chamber, as recited in claim 1. The additional housing part (8) is on an outer peripheral side of the first housing part (2) defining the gas chamber (13), as recited in claim 4. Fig. 2 best illustrates the connection of the first and second housings wherein the second housing part

(5) defining the fluid chamber (14) comprising a shoulder (24) on a free edge facing the first housing part (2) on which a free end of the additional housing (8) is seated, as recited in claim 5. First, second and additional housing parts are substantially cylindrical in there areas of connection, and each comprise at least partially arched termination sides on ends remote from the connection, as recited in claim 14.

5. Claims 1-4 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. 4,605,428 to **Burton**.

The patent to **Burton** discloses an accumulator (A) including a housing (10), with a pair of shells (12 and 20) and a separating element or membrane (28) positioned therebetween dividing the housing into a gas and a fluid (30) chamber. A gas refilling chamber (32) is formed by at least one additional housing part (18) connected with and forming a unit with the accumulator housing and at least one connecting opening in the central portion of member (36) in the accumulator housing connecting the gas refilling chamber to the gas chamber, as recited in claim 1. The additional housing part (18) is on an outer peripheral side of the first housing part (12), connected by welds (16a), defining the gas chamber (32), as recited in claim 4. **Burton** also discloses the separating member (28) including a stop portion (28b) that closes the connection port (26), as recited in claim 13.

Art Unit: 3752

6. Claims 1-4, 6, 7 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. 5,386,925 to **Lane**.

The patent to **Lane** discloses an accumulator (100) including a housing (102) and a separating element or membrane (150) located in and dividing the accumulator into a gas (166) and fluid chamber. A gas refilling chamber is formed by at least one additional housing part (102) connected with and forming a unit with the accumulator housing and at least one connecting opening at (140) in the accumulator housing connecting the gas refilling chamber to the gas chamber, as recited in claim 1. The accumulator including first (114) and second (138) housing parts, as recited in claim 2. The additional housing part (102) is on an outer peripheral side of the first housing part (138) defining the gas chamber (166), as recited in claim 4. Fig. 2 illustrates the connection of the first, second and additional housings parts being connected to one another at one common connection point (144), wherein the common connection point is disclosed as preferably being welded, brazed or soldered, as recited in claims 6 and 7. The flexible membrane includes a stop portion for closing the connection port, as recited in claim 13.

7. Claims 1-6 and 10 rejected under 35 U.S.C. 102(b) as being anticipated by U.S. 3,033,552 to **Ogden**.

The patent to **Ogden** discloses an accumulator including a housing with a separating element or membrane (26) located in and dividing the accumulator housing into a gas chamber (38) and a fluid chamber (16). A gas refilling chamber (14) is formed by at least one additional housing part (22) connected with and forming a unit with the accumulator housing and at least one connecting opening (50) in the accumulator housing connecting the gas refilling chamber to the gas chamber, as recited in claim 1. The accumulator includes first (54) and second (32) parts, as recited in claim 2. The additional housing part (22) is on an outer peripheral side of the first housing part (54) defining the gas chamber (38), as recited in claim 4. Fig. 1 illustrates the connection of the first and second housings wherein the second housing part (32) defining the fluid chamber (16) comprising a shoulder on a free edge facing the first housing part (54) on which a free end of the additional housing (22) is seated, as recited in claim 5. First, second and additional housings are connected to one another at free ends by a common connection point with bolts (34), as recited in claim 6. The additional housing part (22) includes both chambers (36 and 58) thereby making their volume approximately twice the volume (56) of the gas side of the accumulator housing, as recited in claim 10.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Burton**.

The patent to **Burton** does not disclose that the wall thickness of the additional housing part is less than the wall thickness of the first and second housing parts. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to modify the wall thickness of the additional housing part of the **Burton** accumulator to a thickness less than that of the first and second housings because Applicant has not disclosed that a smaller wall thickness for the additional housing part provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with equal thickness as shown by **Burton**. Therefore, it would have been an obvious matter of design choice to modify the wall thickness of **Burton's** additional housing

Art Unit: 3752

part to be greater than that of the first and second housing wall thickness to obtain the invention as specified in claims 11 and 12.

***Allowable Subject Matter***

9. Claims 8 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Schurter et al., Kirk, Jr., and Paul are pertinent to Applicant's invention in disclosing expansion tanks and accumulators including flexible membranes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Patrick F. Brinson** whose telephone number is (703) 308-0111. The examiner can normally be reached on M-F 7:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Michael Y. Mar** can be reached on (703) 308-2087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Patrick F. Brinson  
Primary Examiner  
Art Unit 3752

P. F. Brinson  
April 30, 2004